## RETRACTABLE SYSTEM FOR STOWING AWAY THE PROPULSION COMPONENTS FOR A VESSEL

## **ABSTRACT**

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A retractable propulsion system for vessels comprises an engine (2) mounted within the hull (1; 101), the drive shaft of which is connected through a universal joint (6) to a propeller shaft (3; 103) which is 10 supported so that it can rotate and slide in a bearing (7; 105) at a point close to the propeller (4; 104). The said bearing (7; 105) is articulated at one end of an extension-retraction mechanism (8, 9; 110, 115, 116, 118) through which the said propeller shaft can be 15 placed in a first operating position outside the hull or a second retracted position in a housing (11, 12; 102, 111) provided in the bottom of the said hull. The said housing is provided with at least one door (13, 13'; 15) which can open to permit the said propeller 20 shaft and the said propeller to pass when the two are moved between the said first and second positions and can close so as to form in that position a surface without any break in continuity in the underside of the said hull. A device for actuating, guiding and locking 25 this system comprises an assembly comprising a pair of upper arms (118, 118') and a pair of lower arms (110, articulated together to form essentially articulated parallelogram (118, 118'; 110, connected through its upper articulation (116) with 30 actuating means (9; 115) which can be moved vertically and connected through its lower articulation (7a, 17; 109) with the bearing (7; 105) supporting the shaft (3; 103) of the propeller (4; 104) and provided at its lateral articulations with wedge-shaped members (121, 35 121') designed to bear in a locking relationship against fixing members (113, 113') which are of one piece with the hull (1; 101) of the vessel and grooved (123, 123') in a form corresponding to the said wedgeshaped configuration. The assembly of articulated arms

(118, 118'; 10, 110') is locked in the operating position when the upper arms (118, 118') are placed in an over-centring position by the said actuating means (9; 115) once the said lateral members (121, 121') have been coupled to the said fixing members (113, 113').

(Figure 2)

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